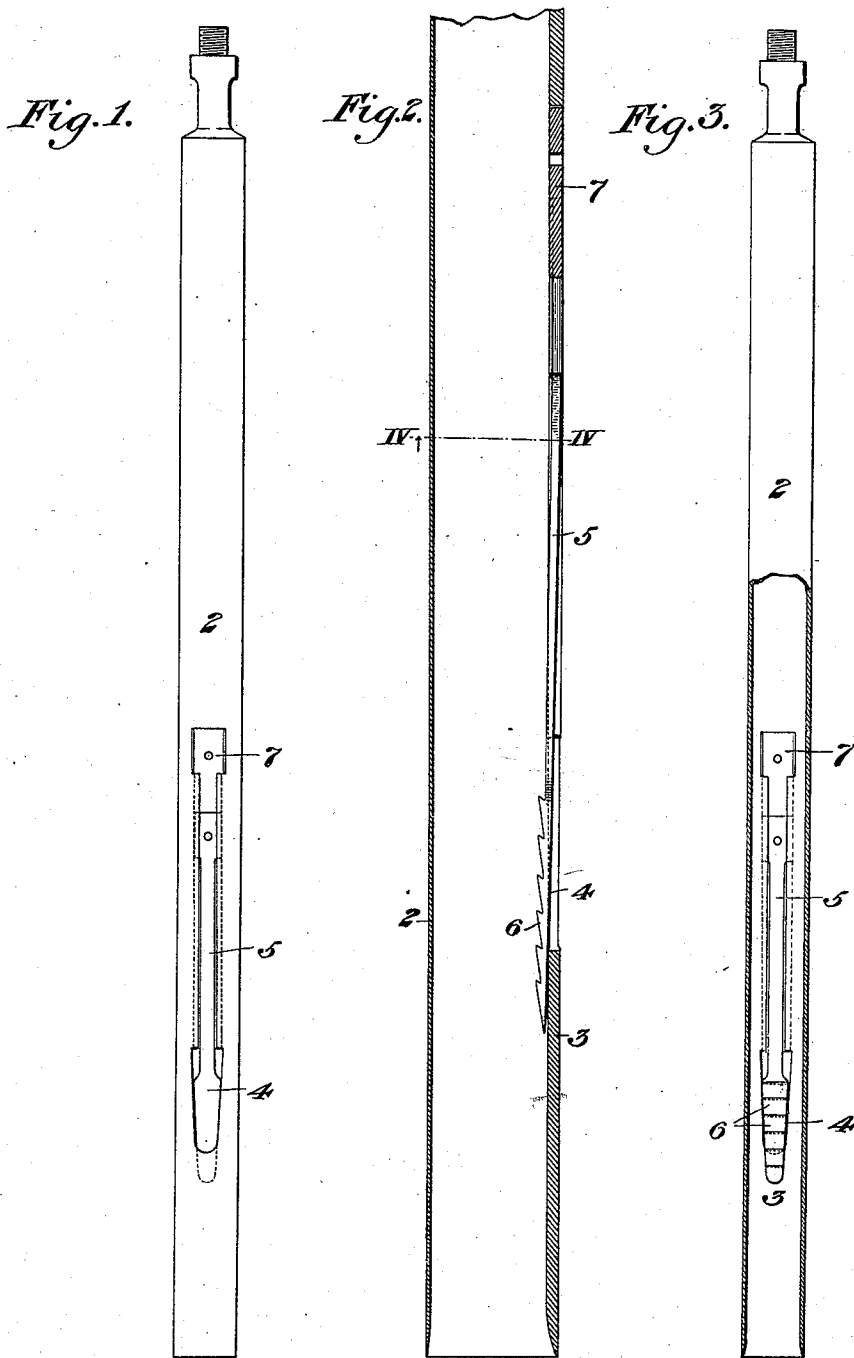


(No Model.)

B. MASSETH & D. W. BLACK.
SUCKER ROD SOCKET.

No. 578,344.

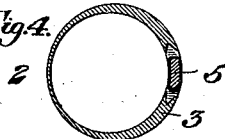
Patented Mar. 9, 1897.



WITNESSES:

J. A. [Signature]
J. D. [Signature]

Fig. 4.



INVENTORS:

Benjamin Massey
David W. Black
by [Signature] [Signature]
their attys.

UNITED STATES PATENT OFFICE.

BENJAMIN MASSETH AND DAVID W. BLACK, OF BUTLER, PENNSYLVANIA.

SUCKER-ROD SOCKET.

SPECIFICATION forming part of Letters Patent No. 578,344, dated March 9, 1897.

Application filed May 2, 1896. Serial No. 589,983. (No model.)

To all whom it may concern:

Be it known that we, BENJAMIN MASSETH and DAVID W. BLACK, of Butler, in the county of Butler and State of Pennsylvania, have
5 invented a new and useful Improvement in Sucker-Rod Sockets, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming part of this specification, in which—
10 Figure 1 is a side elevation of our improved socket. Fig. 2 is a partial longitudinal section of the same on a larger scale. Fig. 3 is a side elevation, partly broken away, to show the spring-jaw; and Fig. 4 is a cross-section
15 on the line IV IV of Fig. 2.

Our invention relates to the sucker-rod sockets which are used in deep wells of small diameter, such as those in which a two-inch casing is employed. In sockets for such use
20 it has been found extremely difficult, if not impossible, to get sufficient thickness of metal in the hollow tube forming the body of the socket to allow the requisite securing of the jaw or jaws in place, while at the same time
25 allowing sufficient internal diameter inside the jaws to allow entry of the sucker-rod therein. This difficulty has been entirely overcome by our invention, which consists in providing a tube having an eccentrically-placed
30 hole therein, thus giving on one side of the tube sufficient thickness for placing and suitably securing the jaw in position.

We will now describe our invention as applied to a socket of the general type shown and
35 described in our former patent, No. 535,709, granted March 12, 1895, though we do not wish to be understood as in any wise limiting our invention to such type.

As shown in Figs. 2 and 4, we form a tube 2
40 with an eccentric hole therethrough, one side 3 of the tube thus being thickened sufficiently for the attachment of the spring-jaw 4. This jaw 4 is formed with a shank-piece 5, having V-shaped edges arranged to fit within
45 grooves at the side of a longitudinal slot in the thicker side of the tube, and at its lower end is provided with a head or gripper 6, hav-

ing inner upwardly-inclined teeth to bite upon the sucker-rod. The slot in the tube is enlarged at its upper end, as shown, to allow
50 entrance of the shank to the guiding-grooves, after which a stop-block 7 is secured in the enlarged portion, thus preventing the upward sliding of the jaw beyond the normal position shown. The slot is also enlarged at its lower
55 end sufficiently so that when the stop-block is removed and the jaw moved upwardly the head will spring out through this enlargement and release the sucker-rod. The tube is provided at its upper end with the usual screw-
60 plug and at its lower end is rounded or beveled outwardly to allow easy entrance of the rod.

The advantages of our invention will be apparent to those skilled in the art, since a tool
65 is provided which can be advantageously used in small holes, the jaw being easily and securely fastened in the tool and also detached from the rod without difficulty.

Modifications in the form, construction, and
70 arrangement of the parts of the device may be made by the skilled mechanic without departure from our invention, since

What we claim is—

1. A sucker-rod socket consisting of a tube
75 having an eccentric hole therein, and a jaw secured in the thicker portion of the tube-wall, substantially as described.

2. A sucker-rod socket consisting of a tube
80 having an eccentric hole therein, and a sliding jaw secured in the thicker portion of the tube-wall, substantially as described.

3. A sucker-rod socket consisting of a tube
85 having an eccentric hole therein, a slot in the thicker side of the tube, and a sliding spring-jaw movable within said slot, substantially as described.

In testimony whereof we have hereunto set our hands.

BENJAMIN MASSETH.
DAVID W. BLACK.

Witnesses:

ALEX. MITCHELL,
ANDREW G. WILLIAMS.